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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,085	04/11/2005	Hans-Dieter Wiek	30815/26239	4229

4743 7590 11/29/2006

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EXAMINER
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STOKES, CANDICE CAPRI

ART UNIT	PAPER NUMBER
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3732

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/510,085	WIEK ET AL.	
	Examiner	Art Unit	
	Candice C. Stokes	3732	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 October 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 22-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 22-26, 28-39, 41 and 43-47 is/are rejected.
- 7) ☒ Claim(s) 27-29, 40 and 42 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/01/04</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

The Preliminary Amendment filed 10/01/04 is hereby acknowledged.

### ***Specification***

The abstract of the disclosure is objected to because it is too long; it should be 150 words or less. Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

Claims 24 and 42 are objected to because of the following informalities: in line 2, "wail" should be "wall". In claim 42, line 4 "the half over" appears to be a grammatical error. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 23 and 37-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 23 recites the limitation "the plug-in fitting" in line 2. There is insufficient antecedent basis for this limitation in the claim. It is unclear which plug-in fitting part the spring tongue is arranged on. For the purposes of rejection it is considered to be the combination of the plug-in pin and recess.

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Claims 37-39 recites the limitation "the pins" in lines 1 and 2 respectively. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

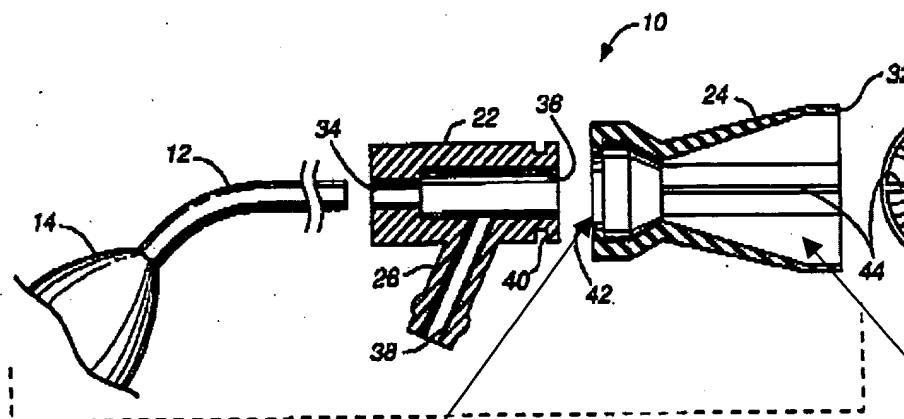
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 22-23,25,32-34,41,44 and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Harrel (USPN 5,547,376). Harrel discloses a medical handpiece (14), comprising in a rearward end region (R) a coupling connection for coupling on to a flexible supply hose (H), with at least one delivery line (16) for an abrasive flow medium extending from the coupling connection to an outlet (54) which is arranged in a forward end region of the handpiece (14) and opens into a hood-form free space (S) of a splash guard (24) which is releasably connected with the handpiece (14) by a plug-in fitting (10) having two plug-in fitting parts in the form of a plug-in recess (where "42" is shown) and a plug-in pin (22) that can be inserted therein, and a latching device integrated in the plug-in fitting (10), wherein the plug-in fitting (10) has a spring tongue (when the pin 22 is fitted within the recess a tongue action is created by outward deflection of latching nose N), elastically outwardly bendable transversely to the plug-in axis (where "44" is shown), with a latching nose (N) arranged thereon on the one plug-in fitting part (24) and an undercut (where "40" is shown in Fig. 2) on the other plug-in fitting part (22). This also

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anticipates claim 41. Regarding claim 23, the spring tongue is arranged on the plug-in fitting (10) and the undercut is arranged on the plug-in pin (22). As to claim 25, the plug-in pin (22) is arranged in an end region of a cannula (12), wherein the plug-in pin (22) is formed by means of a sleeve (34) inserted on or screwed on to the cannula (12). To claim 32, the latch and the spring tongue are considered to be the same element which, as shown in Figs. 2 and 4, bears on the plug-in pin with a bias. Figs. 2 and 4 also show, that the spring tongue is, in axial section, convergently shaped at an inner side, whereby the shape of the inner side is adapted to the shape of a plug-in pin (22) on the handpiece (14). To claim 34, (New) referring to Fig. 2 again, the hood-form free space diverges towards an opening thereof. With regard to claim 44, the connection between the supply hose (H) and the outlet or cannula (12) is a rotary connection and the splash guard (24) body is capable of rotating around the axis of rotation. Finally to claim 47, it is inherent that the splash guard may be twisted onto or pushed onto the cannula.

**FIG. 2**

N

S

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1) Claims 26, 43, and 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrel. Harrel substantially discloses the claimed invention except for a plurality of different splash guards being provided which can be selectively connected with the handpiece. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate additional splash guards for replacement of the splash guards, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

To claim 26, Harrel discloses the claimed invention except for the cannula being releasably connected with a grip part of the handpiece. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the cannula releasable

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from the handpiece, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

2) Claims 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrel in view of Fischer (US 2002/0090591). Harrel discloses the claimed invention except for a circumferential wall surrounding the free space formed by brush-like pins. Fisher teaches brush-like pins as shown in Fig. 1A where "18" is shown. The pins are spliced in a forward region, formed by segment means and are at a spacing from their free end. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the brush-like pins as taught by Fischer into the device disclosed by Harrel in order to provide a means for allowing the dental tool to be used for more thorough polishing and brushing in harder to reach spaces between the teeth.

3) Claims 24,30-31, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrel in view of Warner (USPN 6,257,886). Harrel discloses the claimed invention except for the circumferential wall surrounding the free space has a recess in an edge region thereof. Warner teaches a recess, as best shown in Figure 11 where the axis 264 passes through. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a recess as taught by Warner into the device disclosed by Harrel in order to provide means for the free space to fit over the teeth to provide for better cleaning of the tooth surface.

***Allowable Subject Matter***

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Claims 27-29, 40, and 42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to disclose or reasonably teach a handpiece according to claim 22, wherein the plug-in pin has in axial section, a thickening with a first converging part towards a free end and a second converging part away from the free end, of which the first converging part, upon the plugging together of the plug-in fitting parts, forms a guide surface which urges the latching nose into a release position, and the second converging part forms the undercut. Also to claim 40, the prior art fails to disclose or teach a handpiece according to claim 39 wherein the weakening is defined by a notch on the outer side of each brush-like pin. To claim 42, there is no teaching or disclosure in the prior art of a splash guard according to claim 41, wherein at the edge of the guard body there is arranged at least one projecting edge section which form recesses arranged to the side with reference to the longitudinal axis of the cannula, which edge section extends over approximately the half over the circumference of the circumferential wall of the guard body.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Candice C. Stokes whose telephone number is (571) 272-4714. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.




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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Candice C. Stokes



CRIS L. RODRIGUEZ  
PRIMARY EXAMINER